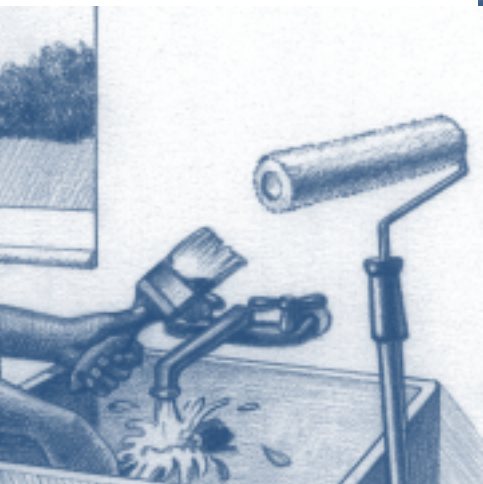


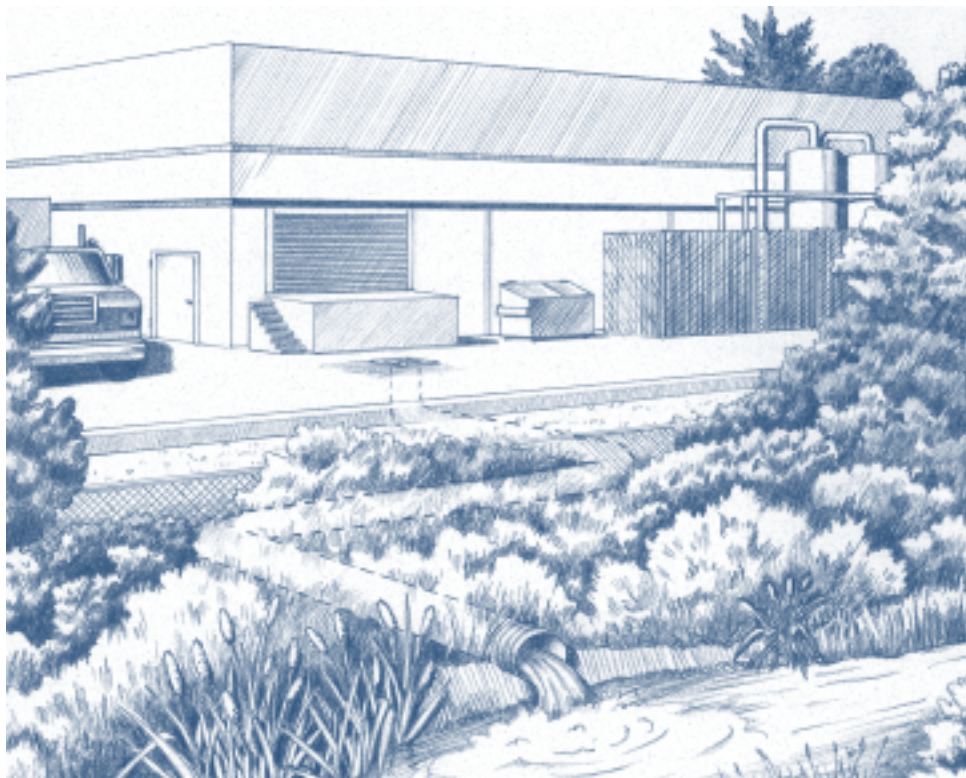


Preventing Storm Drain Pollution



Guidelines for
Commercial and Light
Industrial Facilities





Your Business and the Bay

The Santa Clara Valley Urban Runoff Pollution Prevention Program has prepared this housekeeping guidance manual for commercial and light industrial facilities as part of a program to reduce the amount of pollutants flowing through the storm drain system to local creeks and the South San Francisco Bay.

By following proper housekeeping practices, your business can help reduce pollution flowing to the Bay, protect the South Bay ecosystem for animal and plant life, and protect our quality of life for future generations.

What's the Connection?

Whether your business is two blocks or twenty miles from the water, it has two connections to the San Francisco Bay. Indoor drains, such as sinks, toilets and most floor drains, convey wastewater through the sanitary sewer system to a treatment plant where the water is treated before it is discharged into the Bay.

Outside your business, rainwater, wash water from buildings, road surfaces, vehicles, and equipment pick up oil, grease, cleaning compounds, pesticides, paint, garbage and other pollutants. Storm drains carry these pollutants through the storm drain system directly into local creeks and the Bay—they are not filtered or treated in any way.

So What's the Big Deal?

Rain and wash water in the storm drain can pick up all sorts of pollutants—soap, pesticides, cleaning compounds, coolants, degreasers, automotive fluids, paint, oil, trash and other materials. Even products labeled nontoxic or biodegradable can be harmful to sensitive marine ecosystems. Polluted runoff is harmful to fish and wildlife. It can harm the environment and threaten the health of our children.

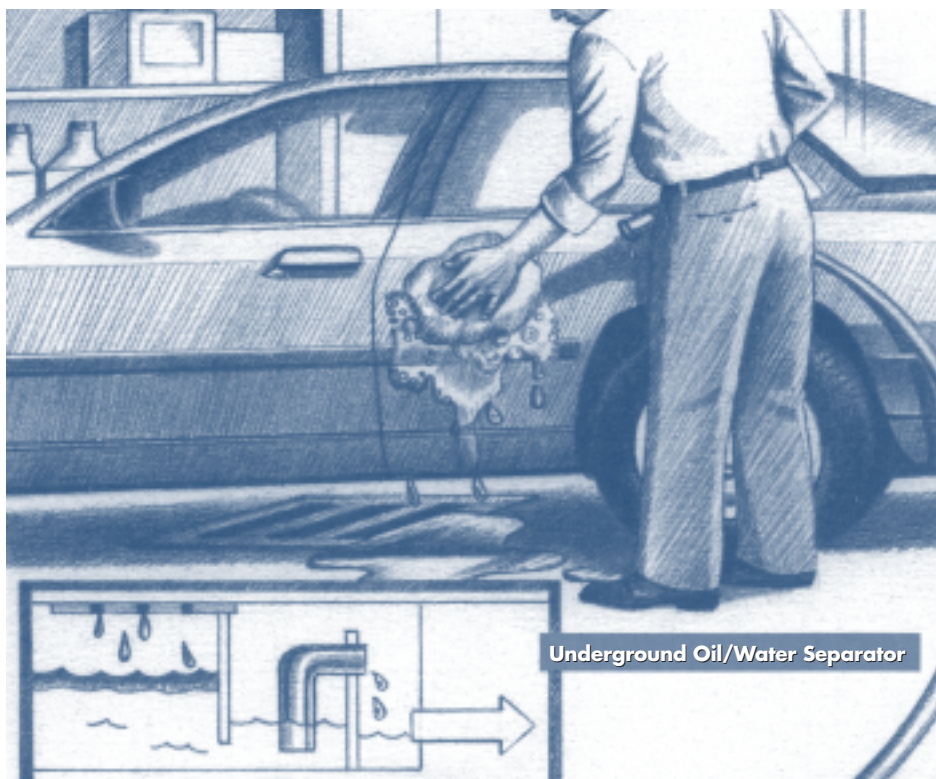
The soap, coolant or oil running into the storm drain from your individual property may not seem like a big deal, but when commercial and light industrial facilities across the Santa Clara Valley fail to clean up their work sites, a lot of pollutants end up in the Bay. In other words, seemingly small problems at your business add up to big problems in the Bay.

It's Also Against the Law!

Allowing discharge of wastes into storm drains is also against the law. If your business allows anything other than uncontaminated rain into the storm drain, you could be cited and held liable under federal, state and local regulations. The procedures outlined in this guidance manual offer some simple suggestions to help you ensure that your business does the right thing.

Doing the Right Thing

By following these guidelines and making sure that your employees and contractors do too, you can help prevent storm drain pollution and keep your business in compliance. You'll also help protect the Bay's ecosystem—and the plant and animal life that it supports—for future generations. Remember, clean water isn't just good business—it's everybody's business.



Cleaning

Wash water from cleaning often contains solvents, detergents, and metals. Wash water should never be discharged to a street, gutter, or storm drain. Contact your local wastewater treatment plant for guidance on what can and can't go to the sanitary sewer.

Wash vehicles over an indoor drain leading to an oil/water separator that flows to the sanitary sewer system.

Equipment Cleaning

- ♦ If possible, clean equipment inside and dispose of wash water to a sink or floor drain that connects to the sanitary sewer.
- ♦ If you must clean equipment outside, work in a bermed area where wash water can be collected and then pumped to an inside sanitary drain. Contact your local wastewater treatment plant for guidance on what can and can't go to the sanitary sewer.

Vehicle Cleaning

- ♦ If possible, wash vehicles at a commercial car wash where water is treated and recycled.
- ♦ If you routinely clean vehicles on-site, provide a bermed vehicle cleaning area with a wastewater collection and treatment system (such as an oil/water separator) which drains to the sanitary sewer system. Contact your local wastewater treatment plant for guidance on permit requirements for fleets.
- ♦ Do not allow soapy wash water to run into the street, gutter or storm drain. Wash where water will flow to a lawn, gravel, or unpaved area. Or contain soapy wash water within a bermed vehicle cleaning area and pump wash water to the sanitary sewer.
- ♦ Do not use solvents or acid-based degreasers in an area where wash water could flow to a street, gutter or storm drain. Instead, confine wash water within a bermed vehicle cleaning area where it can be pumped to an indoor sanitary drain (if allowed). Before using solvents or acid-based degreasers, contact your local wastewater treatment plant for wash water disposal options. [If your indoor drains discharge the San Jose/Santa Clara Water Pollution Control Plant, the pH of your wash water must not be lower than six (6) and must be less than twelve and one-half (12.5).]
- ♦ Reuse or recycle wash water to minimize discharges to the sanitary sewer.



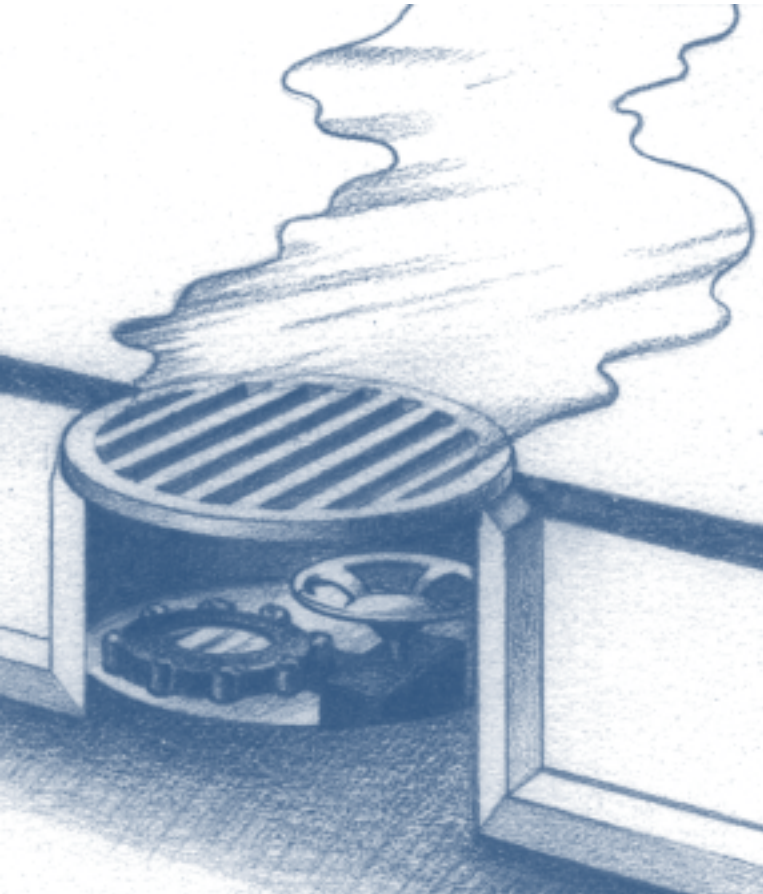
Building and Surface Cleaning

- ♦ When cleaning sidewalks, plazas, and building surfaces, wash water is permitted to go into a street or storm drain **ONLY** if **ALL** of the following conditions are met:
 - Oil or chemical spills have been cleaned up using spill absorbents or some other dry cleaning method before cleaning with water. When oil or chemicals are absorbed, sweep the material up and dispose of it as hazardous waste.
 - Surfaces are free of fresh oil stains and debris.
 - You have swept the area thoroughly prior to cleaning with water.
 - Wash water does not contain soap or other cleaning materials.
 - No paint chips are removed from the surface during cleaning (see Building Repair and Maintenance: Painting).
- ♦ If you must use water for cleanup, use a damp mop instead of hosing down the area. Empty your bucket of wash water into an indoor floor drain or sink that drains to the sanitary sewer. Contact your local wastewater treatment plant for guidance on what can and can't go to the sanitary sewer.
- ♦ When using a cleaning compound, direct wash water runoff to a landscaped or dirt area, or cover storm drains with filter fabric and vacuum or pump wash water into a sanitary sewer drain. Contact your local wastewater treatment plant for guidance — harsh cleaning compounds may require permitting and/or pretreatment.
- ♦ Never hose or sweep interior floor debris to an outside area. Use a broom or vacuum for inside floor cleaning. Collect and dispose of all debris in the garbage or as hazardous waste as appropriate.
- ♦ Use a street sweeper to clean parking areas and roadways. Do not use water. When wet sand blasting, minimize the quantity of water used. Direct runoff to a landscaped or dirt area or filter runoff through a filter fabric to keep sand out of the storm drain. When finished, sweep up sand and debris.
- ♦ If you hire a contractor for building and surface cleaning, make sure they are recognized by the Bay Area Storm Water Agencies Association (BASMAA).

Capture used cleaning water with a storm drain that has a shut off valve.

"When should I call my local wastewater treatment plant?"

- ♦ Contact your local wastewater treatment plant:
 - for information about what can and can't go to the sanitary sewer
 - to find out whether you need a permit to discharge to the sanitary sewer system
 - to find out whether you need to pretreat wash water before it goes down an indoor drain (especially when degreasing or using harsh cleaning compounds)
 - before altering storm drains or sewer lines





Building Repair and Maintenance

Use and dispose of paint, paint thinner, metal filings, cutting oil and concrete properly to prevent them from entering the storm drain where they will harm local creeks and the Bay. Also, make sure that your contractors follow these guidelines; you are responsible for your contractors' actions!

Clean paint brushes and equipment that have been used with water-based paint in an indoor sink.

Painting

- ♦ When pressure washing to prepare surfaces for painting, test painted surfaces for the presence of lead. If lead is not present, place a protective cover of filter fabric over the drain to catch paint chips and dispose of the chips in the garbage. If lead is present, collect chips and wash water and dispose of both as hazardous waste. Better yet, use a dry cleaning method such as scraping and sweeping and dispose of paint chips as hazardous waste.
- ♦ If using water-based paint, brush out excess paint then wash brushes and equipment in the sink. Never dispose of paint or rinse water in a landscaped area, street, gutter or storm drain. Instead, use or recycle leftover paint. Call the County Recycling Hotline at **(800) 533-8414** for more information.
- ♦ If using oil-based paint, brush out excess paint before cleaning with paint thinner. Filter and reuse thinner when possible. Dispose of paint sludge and thinner as hazardous waste. Small businesses may qualify to use the Santa Clara County Small Generator Program at **(408) 299-7300** for a small fee. For information on proper disposal at larger facilities, contact the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division at **(408) 918-3400**.

Plumbing and Pipe Fitting

- ♦ Prevent pipe thread cutting oil and metal shavings from entering storm drains by placing a tarp or protective cover underneath equipment to collect filings, dust, metal shavings, and cutting oil. If necessary, use berms or storm drain covers to protect storm drains. Shovel or vacuum collected material into a garbage bin. Pick up all waste when you are finished in one location or at the end of each work day and schedule disposal.

Concrete

- ♦ Store concrete, grout, and mortar under cover and away from storm drains.
- ♦ Wash out concrete equipment, tools and trucks in a designated area where rinse water will flow onto a landscaped area or dirt pit. Let the water seep into the soil, leaving the cement residue behind. When the residue dries and hardens, dispose of it in the garbage. If you generate a large quantity of concrete, contact your local garbage hauler for disposal guidance. Alternatively, take concrete to a concrete recycling facility. Call the County Recycling Hotline at **(800) 533-8414** for more information.
- ♦ When washing exposed aggregate concrete, divert water to a dirt area where it will not run into a street, gutter or storm drain. If a suitable dirt area is not available, use sand bags to dam up the flow of wash water. Use a wet vac to collect the remaining sludge and then dispose of it in the garbage.

Saw-Cut Slurry

- ♦ Do not allow saw cut slurry to go down a storm drain. Completely cover or barricade storm drain inlets when saw cutting. Block catch basin with protective devices such as a burlap bag containing 2-inch drain rock.
- ♦ Collect, evaporate and remove residue. Pick up all waste when you are finished in one location or at the end of each work day and schedule disposal. Minimize water use.
- ♦ Use an industrial vacuum for clean up. Dispose of all liquids from saw cutting into a landscape area or to the sanitary sewer. Solids can be disposed of into the garbage.
- ♦ If saw cut slurry enters a storm drain catch basin, shovel or vacuum slurry into a garbage bin immediately.



Facility Equipment

Following an inspection and maintenance schedule and disposing of equipment byproducts (blowdown water, condensate, residues, melt water, etc.) properly will help keep pollutants out of storm drains, local creeks and the Bay where they can harm animal and plant life.

Protect materials from rainwater in an outdoor storage facility or inside a building. (Side protection removed for illustrative purposes.)

Material Storage

- ♦ For information on hazardous materials and waste storage, contact your local fire department or the Santa Clara County Department of Environmental Health, Hazardous Materials Compliance Division at **(408) 918-3400**.
- ♦ As a temporary storage option, use a tarp or plastic sheet to cover materials exposed to rainwater
- ♦ Install a roof over permanent outdoor storage areas, or store materials inside a building. Contact your local building and fire officials before beginning construction or relocating chemicals.
- ♦ Material storage areas should also have side protection, such as walls or curtains, to adequately shield materials from exposure to rainwater.
- ♦ Replace or repair leaky equipment and containers. Place drip pans or absorbent materials under leaky equipment and containers until they can be repaired.

Cooling Towers

- ♦ Use of biocidal cooling tower additives (those containing copper, tributyl tin or chromium) may be prohibited. Contact your local wastewater treatment plant for more information.
- ♦ Drain all cooling tower discharges to the sanitary sewer. Do not drain discharges to the parking lot, street, gutter or storm drain.
- ♦ Cooling tower chemicals should not be stored adjacent to storm drains. For questions regarding chemical storage, contact your local fire department or the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division at **(408) 918-3400**.

HVAC, Chillers, Boilers, & Refrigerator Units

- ♦ Existing buildings with air conditioners can discharge non-contaminated condensate (condensate which does not contain descaling or anti-algal agents) to the storm drain.
- ♦ Direct HVAC contractors to dispose of flushing agent residues (descaling or anti-algal agents) in the sanitary sewer. The use of chemicals containing copper and tributyl tin is prohibited.
- ♦ Melt water from de-icing refrigeration units, cryogenic tanks, etc., may be disposed of in a storm drain as long as it does not contain any type of pollutant or come into contact with a pollutant (from drum and equipment storage nearby, for example).
- ♦ All treated boiler discharge and blowdown, including condensation, must be discharged to the sanitary sewer or reused or recycled in a closed loop system approved by your permitting agency.
- ♦ New buildings should be designed so that all discharges from air conditioner condensation lines drain to the sanitary sewer. Consult your local planning or building department for more information.

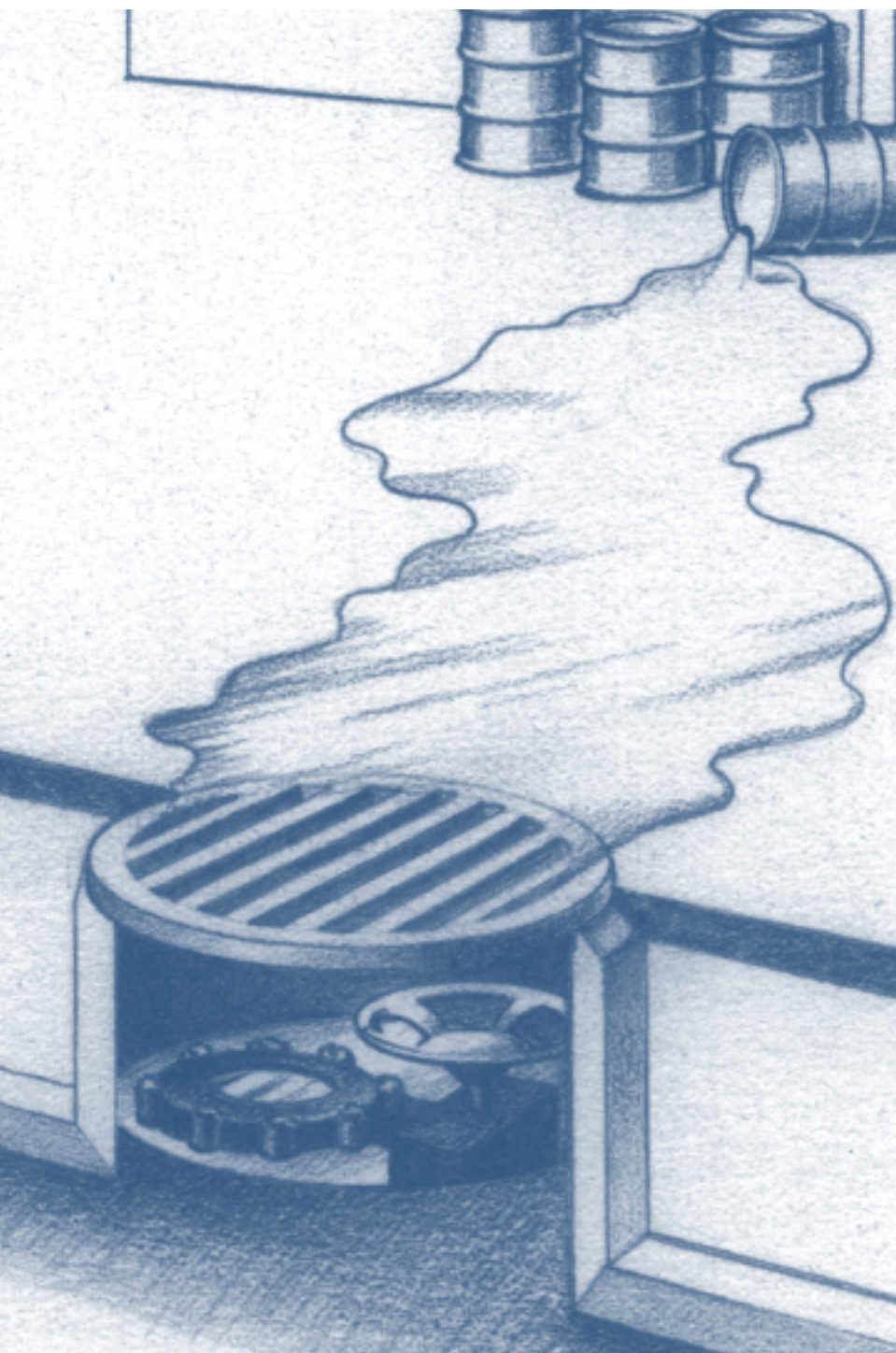
Air Compressors

- ♦ Inspect and maintain air compressors routinely. Air compressors produce small quantities of automatic blow-down water, which commonly contains lubricating oil or other potential pollutants. This may not be discharged to the storm drain. Discharge all blowdown water to the sanitary sewer after contacting your local wastewater treatment plant for guidance.
- ♦ If the compressor has a frequent small bleed, use a drip pan to collect the water. Dispose of accumulated water into the sanitary sewer.
- ♦ Repair all fuel and oil leaks immediately. Use a drip pan until repairs are made. Clean any spilled fuel or oil using a spill absorbent or some other dry cleaning method. When the spill is absorbed, sweep up the saturated absorbent and dispose of it as hazardous waste. Small businesses may qualify to use the Santa Clara County Small Generator Program at **(408) 299-7300** for a small fee. For information on proper disposal at larger facilities, contact the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division at **(408) 918-3400**.

Loading Docks

- ♦ Pick up litter around loading docks regularly.
- ♦ Keep absorbent materials nearby in order to clean up or contain spills promptly.
- ♦ If you routinely handle liquids, your permitting agency may require that you install an emergency shut-off valve or storm drain plug that can be opened and closed in the nearest storm drain. Look in the Yellow Pages under Environmental, Conservation and Ecological Products for a list of suppliers.

Storm drains with shut-off valves can catch hazardous spills before they reach the storm drain system.





Landscaping

- ♦ Never apply chemicals or rinse water from equipment that has contained fertilizers, pesticides or herbicides to vegetation within a 24-hour period of forecasted rain especially when handling liquids and powders.
- ♦ Use the least toxic product for the job. For information on less toxic products call the Santa Clara Valley Urban Runoff Pollution Prevention Program at **(800) 794-2482**.
- ♦ Use the recommended amount of chemical for the job. If using concentrate, mix only the amount you need and spray out all of the product. Rinse equipment over a landscaped area. Never pour rinse water down a storm drain.
- ♦ Dispose of excess lawn and garden chemicals as hazardous waste. Small businesses may qualify to use the Santa Clara County Small Generator Program at **(408) 299-7300** for a small fee. For information on proper disposal for larger businesses, contact the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division at **(408) 918-3400**.
- ♦ Keep leaves, grass clippings, and other yard waste out of the streets, gutters and storm drains.

Rinse tools and equipment over a landscaped area, away from storm drains.



Storm Drain Maintenance

Show your commitment as a clean business and to a healthy Bay by maintaining the storm drain inlets on your property.

- ♦ Locate and label all storm drain inlets on your business site. To receive free “No Dumping! Flows to Bay” storm drain stencils call the Santa Clara Valley Urban Runoff Pollution Prevention Program at **(800) 794-2482**.
- ♦ Sweep up debris from parking lots and other paved areas regularly.
- ♦ Clean out all storm drain inlets on your property with a vacuum or shovel at least twice a year — just before the start of the rainy season and after the first major rain.
- ♦ The installation of French drains or dry wells for the purpose of disposing of storm water runoff is prohibited. Runoff entering these small, grated drains flows through a column of rocks and dirt to the groundwater aquifer, which is a source of drinking water in some areas. Never dump or discharge into a French drain or dry well. Call the Santa Clara Valley Water District, Well Services Division at **(408) 265-2600** for more information.

Clean out storm drain inlets at least twice a year — before the rainy season and just after the first major rain.



Spill Prevention and Cleanup

The majority of pollution that flows off a site can usually be avoided by taking precautions to prevent spills and cleaning spills up promptly if they do occur.

- ♦ Exercise care and planning to avoid potential spills, especially when handling liquids and powders.
- ♦ Maintain a regular inspection and repair schedule to prevent leaks from equipment and storage containers.
- ♦ Provide employees and contractors with absorbent materials for spill containment and cleanup. Keep spill prevention and cleanup materials in a location which is easy to find and easily accessible.
- ♦ Clean up spills immediately with a spill absorbent material. When the spill is absorbed, sweep up saturated absorbents and dispose as hazardous waste. Small businesses may qualify to use the Santa Clara County Small Generator Program at **(408) 299-7300** for a small fee. For information on proper disposal at larger facilities, contact the Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division at **(408) 918-3400**.
- ♦ Keep a supply of storm drain covers or plugs on hand. Make sure employees know where they are stored and how to use them. Keep these materials in a high profile location. Look in the Yellow Pages under Environmental, Conservation, and Ecological Products for a list of suppliers of storm drain plugs, valves, rubber mats to use as storm drain covers, storm drain filtering mats and outdoor cleaning berms.
- ♦ If you routinely handle liquids, your permitting agency may require that you install an emergency shut-off valve or storm drain plug (shown on page 13) that can be opened and closed in the nearest storm drain. Look in the Yellow Pages under Environmental, Conservation, and Ecological Products for a list of suppliers.



Use dry absorbents to clean up spills.



Sharing Information

Make sure employees and contractors know where to clean equipment and dispose of wash water.

Educating & Training Employees

- ◆ Storm drain pollution prevention begins and ends with effective employee and training.
- ◆ Train new employees on the procedures in this guidance manual.
- ◆ Review the guidelines in this guidance manual regularly with all employees.

Overseeing Contractors

- ◆ You are responsible for your contractor's actions.
- ◆ Before beginning work, show contractors where to clean equipment and dispose wash water or process waters.
- ◆ Make sure contractors know where emergency spill equipment is stored and how to use it.
- ◆ Incorporate pollution prevention practices into contract specifications.

The Bottom Line...

- ◆ You are a clean business:
 - Tell your customers!
 - Let your customers know what you're doing to prevent water pollution and encourage them to adopt clean water practices too.
 - Where appropriate, itemize charges for hazardous waste handling and disposal.

Numbers to Call

To report a hazardous materials spill that is causing an immediate threat to human health or the environment

Dial 911



Environmental Services

In accordance with the Americans with Disabilities Act, City of San José Environmental Services Department materials can be made available upon request in alternative formats, such as Braille, large print, audio-tape or computer disk. Requests may be made by calling (408) 535-3500 (Voice) or (408) 294-9337 (TTY) or (408) 294-9337 (CRS).



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Storm Water Pollution Control Requirements for Business and Industry

1-888-BAYWISE (229-9473).....(888) 229-9473

Santa Clara Valley Urban Runoff Pollution Prevention Program(800) 794-2482

Wastewater Permitting and Allowable Discharges to the Sanitary Sewer

San Jose/Santa Clara Water Pollution Control Plant.....(408) 945-3000
(also serves Campbell, parts of Cupertino, Los Gatos, Milpitas, Monte Sereno, and Saratoga)

City of Sunnyvale Water Pollution Control Plant.....(408) 730-7260
(also serves parts of Cupertino)

Regional Water Quality Control Plant (RWQCP).....(650) 329-2598
(serves East Palo Alto, Los Altos, Los Altos Hills, Mountain View, Palo Alto, and Stanford University)

Compliance with Hazardous Waste Regulations

Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division(408) 918-3400

Small Business Hazardous Waste Disposal

Santa Clara County Hazardous Waste Recycling and Disposal Small Generator Program(408) 299-7300

City of Palo Alto – open to businesses in the RWQCP service area(650) 496-6980

City of Sunnyvale – open to Sunnyvale businesses(408) 730-7262

Green Business

Santa Clara County Green Business Program(408) 282-3180

Pesticide, Herbicide and Fertilizer Alternatives

Santa Clara Valley Urban Runoff Pollution Prevention Program(800) 794-2482

www.mywatershedwatch.com